



Ian Gallagher

Education

2017–2021 B.S. Mathematics, Cal Poly, San Luis Obispo, 3.9 GPA.

Graduated Summa Cum Laude along with a computer science minor. Attended Simple Group, a research seminar with a focus on algebraic topics. Graduate courses in Field Theory, Algebra, and Real Analysis.

Experience

July 2021– **Software Development Consultant**, *Pariveda Solutions*, San Francisco.

Present Member of Agile team developing for a React/GraphQL/Salesforce technology stack.

Utilized Kubernetes infrastructure hosted on AWS services for development.

Built and deployed full stack features for company's next generation customer support platform.

2019–2021 **Software Team Member**, Cal Poly CubeSat Laboratory.

Software Lead for NASA ER-2 payload designed to record plane's in-flight vibrational profile and interface with custom XCube CPCL payload carrier.

Refactored and updated existing microcontroller analog to digital converter sampling pipeline. Designed for embedded Linux platforms. Languages Used: C, Python.

Summer 2020 Frost Research Scholar, Cal Poly Mathematics Department.

Member of pure mathematics student research team lead by Dr. Eric Brussel.

Generalized results about the structure of the quaternions to a generalization of the quaternions. Classified the embedded commutative sub-algebras, their conjugacy classes, and associated moduli spaces.

Summer 2019 Frost Research Scholar, Cal Poly Mathematics Department.

Implemented theoretical climate models from research papers in Matlab.

Utilized shell scripts to parallelize runs of model over a wide array of input parameters.

Created visuals and statistical tests to investigate link between internal model behavior and external forcing signals.

Technical Skills

Languages C, Python, Java, Matlab, JavaScript, TypeScript

Frameworks React, GraphQL, REST

Tools Linux, Bash, Git, Docker, Kubernetes, Buildkite, Valgrind, GDB, LATEX

Awards & Certifications

- 2021–2024 **Solutions Architect Associate**, *Amazon Web Services*.

 Demonstrated the ability to build secure and robust solutions using architectural design principles.
 - 2021 **Robert P. Balles Most Outstanding Senior**, *Cal Poly Mathematics Department*.

 One of two students selected on the basis of participation in clubs or societies, contribution to the image of the department, and scholastic achievement.
 - 2020 **Accenture Outstanding Junior of the Year**, *Cal Poly Mathematics Department*. Awarded to a single junior in the mathematics major for demonstrating superior leadership skills and the ability to work effectively with peers and faculty.
- 2019, 2020 **Edward Van Duyne Memorial Scholarship**, *Cal Poly Mathematics Department*. Two time recipient of scholarship intended for high-achieving students in the mathematics major.